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| Title | **Repair electrical accessories of vehicle** | | |
| Level | **2** | **Credits** | **14** |

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| Purpose | This Competency Standard identifies the competencies required to Repair Electrical Accessories of Vehicle by Auto Electrician in accordance with the organization’s approved guidelines and procedures. Trainee will be expected to identify faults in the electrical accessories of vehicle and figure out possible solutions, either by repairing or replacing the parts according to the requirement. Trainee’s underpinning knowledge regarding tools, techniques, methods and procedures for installation and repairing/replacing electrical accessories of a vehicle will be sufficient to provide Trainee the basis for his / her work. |

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| Classification ISCED | 0716 Motor vehicles, ships and aircraft |

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| Available grade | Competent / Not yet competent |

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| Modification history | N/A |

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| **Unit of Competency** | **Performance Criteria** | **Knowledge** | **Tools & Equipment** |
| F1: Diagnose faults in ElectricalAccessories of Vehicle | *TraineeMust be able to:*  P1. Carry out tests on following to determine faults:   * Power Windows * Radio Antenna * Cigarette Lighter * Air Conditioner * Fog Lights * Defogger * Centre Door Locking System * Sun Roof * Wiper Motor * Horn * Navigation/stereo System   P2. Use proper tooling and techniques to perform diagnostic tests.  P3. Adopt a method for diagnosing faults in electrical accessories without causing damage. | *Traineemust be able to know and understand:*  K1. Method of using multi-meter.  K2. Components and functions of different electrical accessories in vehicle.  K3. Types of faults in different electricalaccessories in vehicle.  K4. Techniques and procedures of diagnosing faults in electrical accessories.  K5. Safety precautions and guidelines.  K6. Reporting procedures of faults and possible repair actions.  K7. Guidelines, procedures and policies of the organization.  K8. Read and interpret repair manual. | Multi-meter, scanner, Tool kit (Spanner set, Screw driver, Pliers), Socket Set, Tester, Repair Manual. |

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| **Unit of Competency** | **Performance Criteria** | **Knowledge** | **Tools & Equipment** |
|  | P4. Identify faults and determine repair actions to relevant person.  P5. Carry out tests according to guidelines and organization’s procedures / policies.  P6. Follow Repair manual for diagnosing fault in accessories.  P7. Report the diagnosed fault to the concerned department. |  |  |
| F2. Repair or Replace Electrical Accessories in Vehicle | *TraineeMust be able to:*  P1. Select relevant tools and method for the job.  P2. Follow repair manual in replacing or repairing the faulty electricalaccessories in vehicle.  P3. Dismantle electrical accessories from vehicle according to manufacturer’s manual.  P4. Replace faulty electrical accessories(defogger, wiper motor, radio antenna, motor of sun-roof, horn etc) according to procedure.  P5. Repair faulty electrical accessories (air conditioner, power window, cigarette lighter, center door locking system, navigation system etc.) according to procedure.  P6. Check and verify the electrical accessory installed, after repairing or replacing, is functioning properly. | *Traineemust be able to know and understand:*  K1. Read and interpret repair manual and manufacturer’s instructions.  K2. Procedure of dismantling and assembling of electrical accessories from vehicle.  K3. Procedures for replacing accessories (defogger, wiper motor, radio antenna, motor of sun-roof, horn etc.).  K4. Procedure for repairing of accessories (air conditioner, power window, cigarette lighter, center door locking system, navigation system etc.).  K5. Safety precautions and guidelines. | Multi-meter, scanner, Tool kit (Spanner set, Screw driver, Pliers), Socket Set, Tester, Repair Manual |